November 16, 1999

Mr. Jim Fenn
Manager
Bauer Built, Inc.
5719 Kopetsky Drive
Suite A-E
Indianapolis, Indiana 46217

Re: Registered Construction and Operation Status,
097-11529-00359

Dear Mr. Fenn:

The application from Bauer Built, Inc., received on September 23, 1999, has been reviewed. Based on the data submitted and the new provisions in IAPCB Regulation 2 (Permits) and state regulations 326 IAC 2-5.1-2 and 326 IAC 2-5.5, it has been determined that the following tire retreading facility, to be located at 5719 Kopetsky Drive, Suite A-E, Indianapolis, Indiana, is classified as registered. This Registration shall expire November 16, 2004.

(a) One (1) tire buffing/grinding unit, identified as EP-1, with interlocked cyclone separator with a maximum throughput of 18.75 tires per hour.

(b) One (1) tire cement spray booth, identified as EP-2, equipped with a low pressure high volume spray gun for finished tires and rubber tire carcass, at a maximum capacity of 16.7 tires per hour and a maximum of 0.0553 gallons per tire.

(c) One (1) tire autoclave curing booth, identified as EP-3.

(d) One (1) natural gas fired boiler, identified as EP-4, rated at 2.0 million British thermal units per hour, gas flow rate of 1,515 acfm.

(e) One (1) rim refurbishing unit, identified as EP-5, with the following equipment:
    (1) One (1) powder coater with a low pressure high volume spray gun with filter, for refurbished rims, at a maximum capacity of 2.1 tires per hour; and
    (2) One (1) mechanical blasting unit with an internal filter, utilizing steel shot with a blast rate of 50 rims per day.

The following conditions shall be applicable:

1. Pursuant to IAPCB Regulation 5-1-2 (Smoke and Other Visible Emissions) and 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following:

    (a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

    (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

2. Pursuant to IAPCB Regulation 2 (Permits) and 326 IAC 6-2-4(a) (Particulate Emission

Limitations for sources of Indirect Heating), particulate matter (PM) emissions from 2.0 million BTU/hour boiler shall be limited to 0.6 pound per million BTU heat input.

3. Pursuant to IAPCB Regulation II-2(A)(2) and 326 IAC 6-3 (Process Operations), the cyclone collector shall be in operation at all times when the tire buffing/grinding unit is in operation, and shall not exceed the allowable particulate (PM) emission rate of 0.95 pounds per hour.

4. Pursuant to The Code of Indianapolis and Marion County Chapter 511, this registration will be subject to annual operating fees.

5. Pursuant to IAPCB Regulation 2-6 (Annual emission statement rule) and state regulation 326 IAC 2-6(Emission Reporting), an authorized individual shall provide an annual emission statement to the Environmental Resources Management Division and the Office of Air Management at the addresses listed below no later than April 15 of each year.

Technical Support and Modeling
Office of Air Management
100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
and
Environmental Resources Management Division
Air Quality Management Section, Compliance Data Group
2700 South Belmont Avenue
Indianapolis, Indiana 46221-2097

6. Pursuant to IAPCB Regulation 2 (Permits) and state regulation 326 IAC 2-5.1-2(f)(3), an authorized individual shall provide an annual notice to the Environmental Resources Management Division and the Office of Air Management that the source is in operation and in compliance with this registration at the addresses listed below, in the format attached, no later than April 15 of each year.

Compliance Data Section
Office of Air Management
100 North Senate Avenue
P.O. Box 6015
Indianapolis, IN 46206-6015
and
Environmental Resources Management Division
Air Quality Management Section, Compliance Data Group
2700 South Belmont Avenue
Indianapolis, Indiana 46221-2097

This registration is the first air approval issued to this source. The source may operate according to IAPCB Regulation 2 (Permits) and state regulation 326 IAC 2-5.5.

The Permittee shall submit an application to renew this Registration prior to August 16, 2004. An application or notification shall be submitted in accordance with IAPCB Regulation 2 (permits) and

state regulation 326 IAC 2 to the Air Quality Management Section (AQMS) and the Office of Air Management (OAM) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,

Robert Holm, Ph.D
Administrator

TMH

cc: Matt Mosier, Permits and Compliance Program Manager
Cheryl Carlson, Enforcement Program Manager
Mindy Hahn, IDEM
Gail McGarrity, IDEM

Registration
Annual Notification

This form should be used to comply with the notification requirements under ***326 IAC 2-5.1-2(f)(3) or 326 IAC 2-5.5-4(a)(3)***

Company Name:
Address:
City:
Authorized individual:
Phone #:
Registration #:

I hereby certify that **Bauer Built, Inc.** is still in operation and is in compliance with the requirements of Registration **097-0000-00359**.

Name (typed):
Title:
Signature:
Date:

Indianapolis Environmental Resources Management Division
Air Quality Management Section

and

Indiana Department of Environmental Management
Office of Air Management

Technical Support Document (TSD) for a Registration

Source Background and Description

Source Name:	Bauer Built, Inc.
Source Location:	5719 Kopetsky Drive
County:	Marion
Operation Permit No.:	097-11529-00359
Permit Reviewer:	Tena Hopkins

The Environmental Resources Management Division (ERMD) has reviewed an application for Bauer Built, Inc. relating to the operation of a tire retreading facility with a maximum capacity of 18.75 tires per hour.

New Emission Units and Pollution Control Equipment

The source consists of the following emission units and pollution control devices:

(a) One (1) tire buffing/grinding unit, identified as EP-1, with interlocked cyclone separator with a maximum throughput of 18.75 tires per hour.

(b) One (1) tire cement spray booth, identified as EP-2, equipped with a low pressure high volume spray gun for finished tires and rubber tire carcass, at a maximum capacity of 16.7 tires per hour and a maximum of 0.0553 gallons per tire.

(c) One (1) tire autoclave curing booth, identified as EP-3.

(d) One (1) natural gas fired boiler, identified as EP-4, rated at 2.0 million British thermal units per hour, gas flow rate of 1,515 acfm.

(e) One (1) rim refurbishing unit, identified as EP-5, with the following equipment:

(1) One (1) powder coater with a low pressure high volume spray gun with filter, for refurbished rims, at a maximum capacity of 2.1 tires per hour; and

(2) One (1) mechanical blasting unit with an internal filter, utilizing steel shot with a blast rate of 50 rims per day.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

Existing Approvals

There are no existing approvals at this source.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (^{0}F)
EP-1	tire buffing/grinding	26	1.92	4500	ambient +30
EP-2	(2) cement spay booths	32	2	6000	ambient
EP-3	autoclave curing	24	1.5	3000	ambient
EP-4	natural gas boiler	24	1.5	1515	400
EP-5	rim refurbishing	n/a	n/a	600	ambient

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on September 23, 1999, with additional information received on September 24, 1999.

Emission Calculations

See Appendix A , of this document for detailed emissions calculations.

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency.”

Pollutant	Potential To Emit (tons/year)
PM	1.27
PM-10	0.1
SO_2	0.01
VOC	24.53
CO	0.74
NO_x	0.88

HAP's	Potential To Emit (tons/year)
Combination	0.14
TOTAL	0.14

(a) This source is **not** a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not in one of the 28 listed source categories. Therefore the requirements of 326 IAC 2-5 apply.

(b) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Actual Emissions

No previous emission data has been received from the source.

County Attainment Status

The source is located in Marion County.

Pollutant	Status
PM-10	attainment
SO_2	attainment
NO_2	attainment
Ozone	attainment
CO	attainment
Lead	attainment

(a) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Marion County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(b) Marion County has been classified as attainment or unclassifiable for PM-10, SO_2, NO_2, Ozone, CO, and Lead. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(c) Fugitive Emissions

Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2, 40 CFR 52.21, or 326 IAC 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Source Status

Pollutant	Emissions (ton/yr)
PM	1.27
PM10	0.1
SO_2	0.01
VOC	24.53
CO	0.74
NO_x	0.88

This source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not in one of the 28 listed source categories.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This new source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:
(a) each criteria pollutant is less than 100 tons per year,
(b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
(c) any combination of HAPs is less than 25 tons/year.

This is the first air approval issued to this source.

Federal Rule Applicability

1. The natural gas fired boiler is not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60, Subpart D), due to the heat input capacity being less than 10 mmBtu/hr.

2. There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR art 63) applicable to this source.

State and Local Rule Applicability - Entire Source

1. IAPCB Regulation 2 (Permits) and 326 IAC 2-5 (Registration Content)

   Pursuant to IAPCB Regulation 2 (Permits) and 326 IAC 2-5.5-4 (Registration Content) An authorized individual shall provide an annual notice to the Environmental Resources Management Division and the Office of Air Management that the source is in operation and in compliance with this registration pursuant to state regulation 326 IAC 2-5.5-4(a)(3).

2. IAPCB Regulation 2-6 (Annual emission statement rule) and 326 IAC 2-6 (Emission

Reporting)

Pursuant to IAPCB Regulation 2-6 (Annual emission statement rule) and 326 IAC 2-6 (Emission Reporting), an authorized individual with a source that has a potential to emit more than ten (10) tons per year of volatile organic compounds, shall provide an annual emission statement to the Environmental Resources Management Division and the Office of Air Management.

3. IAPCB Regulation 5-1-2 (Smoke and Other Visible Emissions) and 326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to IAPCB Regulation 5-1-2 (Smoke and Other Visible Emissions) and 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of thirty percent (30%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State and Local Rule Applicability - Individual Facilities

1. IAPCB Regulaion 2 (Permits) and 326 IAC 6-2-4(a) (Particulate Emission Limitations for sources of Indirect Heating)

Pursuant to IAPCB Regulation 2 (Permits) and 326 IAC 6-2-4(a) (Particulate Emission Limitations for sources of Indirect Heating), particulate matter (PM) emissions from the 2.0 million BTU/hour boiler shall be limited to 0.6 pounds per million BTU heat input.

$$Pt = \frac{1.09}{Q^{0.26}}$$

Pt= Pounds of particulate matter emitted per million Btu (lb/mmBtu) heat input.

Q= Total source maximum operating capacity rating in million Btu per hour (mmBtu/hr) heat input.

2. IAPCB Regulation 2 (Permits) and 326 IAC 6-3 (Process Operations)

Pursuant to IAPCB Regulation 2 (Permits) and 326 IAC 6-3 (Process Operations), the controls shall be in operation at all times when the tire retreading operation is in operation, and shall not exceed the allowable particulate (PM) emission rate of 0.95 pounds per hour.

$$E = 4.10\ P^{0.67}$$

3. IAPCB Regulation 2 (Permits) and 326 IAC 8-1-6 (General Provisions relating to VOC rules: general reduction requirements for new facilities)

4. The surface coating operation is not subject to the requirements of 326 IAC 8-1-6 due to the potential volatile organic compound emissions being less than twenty-five (25) tons

per year.

5. IAPCB Regulation 2 (Permits) and 326 IAC 8-2 (Surface Coating Emission Limitations)

The surface coating operation is not subject to the requirements of 326 IAC 8-2 due to the specific operation not having an applicable rule.

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Construction Permit Application Form Y.

This new operation will emit levels of air toxics less than those which constitute a major source according to Section 112 of the 1990 Amendments to Clean Air Act.

See attached spreadsheets for detailed air toxic calculations.

Conclusion

The operation of Bauer Built shall be subject to the conditions of the attached proposed Registration R097-11529-00359.

Appendix A: Emission Calculations
Natural Gas Combustion Only
MM Btu/hr 0.3 - < 10

Company Name: **Bauer Built, Inc. Interstate Brands Corporation**
Address City IN Zip: **5719 Kopetsky Drive, Suites A-E, Indianapolis, Indiana 46217**
R: **097-11529-00359**
Reviewer: Tena Hopkins
Date: 10/11'99

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
2.0	17.5

	Pollutant					
	PM	PM10	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	13.7	13.7	0.6	100.0	5.3	21.0
Potential Emission in tons/yr	0.1	0.1	0.0	0.9	0.0	0.2

Methodology

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Emission Factors for NOx: uncontrolled = 100, Low Nox Burner = 17, Flue gas recirculation = 36

Emission Factors for CO: uncontrolled = 21, Low NOx Burner = 27, Flue gas recirculation = ND

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-03-006-03

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Appendix A: Emissions Calculations
VOC and Particulate
From Surface Coating Operations

Company Name: **Bauer Built, Inc.**
Address City IN Zip: 5719 Kopetsky Drive
R: 097-115429-00359
Reviewer: Tena Hopkins
Date: 10/11/99

Material	Density (Lb/Gal)	Weight % Volatile (H20& Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Vol (solids)	Gal of Mat (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential ton/yr	lb VOC /gal solids	Transfer Efficiency
Lacolene	6.0	100.00%	0.0%	100.0%	0.0%	0.00%	0.05530	17.250	5.98	5.98	5.70	136.86	24.98	0.00	ERR	75%
Powder Coating	n/a	0.00%	0.0%	0.0%	0.0%	100.00%	n/a	2.100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%

State Potential Emissions **Add worst case coating to all solvents** **5.70** **136.86** **24.98** **0.00**

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
Total = Worst Coating + Sum of all solvents used

Appendix A

EMISSIONS CALCULATIONS

Bauer Built R-097-11529-00359

VOC Calculations

Maximum Throughput of 440 tires/day

EP -1 (Tire Grinding)

440 tires ground/day

12 lbs. of rubber ground off/tire

=(440 tires ground/day)(356 days/yr)(12 lbs rubber/tire)(5.21E-04 lb VOC/lb rubber cured)/(2000 lbs/ton)

= 0.50 ton VOC/yr

EP-2 (Cement Booth)

440 tires/day

Cement is 100% solvent

=(440 tires/day)(132.75 grams cement/tire)/(454 grams/lb)/(2000 lbs/ton)(365 day/yr)(100% solvent)

= 23.48 ton VOC/yr

EP-3 (Autoclaving)

440 tires/day

=(440 tires/day)(125 lbs/tire)(1.56E-04 lb VOC/lb rubber cured)(87% rubber content)(40% reduction for pre-cured rubber)/2000 lb/ton)(365 days/yr)

=0.55 tonsVOC/yr

HAPs Summary

EP-1 (Tire Grinding)

440 tires/day

=(440 tires/day)(125 lbs/tire)(1.81E-04 lb HAPs/lb rubber cured)(40% reduction for pre-cured rubber)(87% previous cured rubber)(365 days/year)/(2000 lbs/ton)

EP-2 (Cement Booth)

The cement does not have HAPs.

EP-3 (Autoclaving)

440 tires/day

=(440 tires/day)(365 days/yr)(12 lbs/tire rubber ground off)(1.43E-04 lb HAPs/lb rubber cured)/(2000 lbs/ton)

=0.14 ton/yr HAPs

EP-4(Autoclave boiler)

Natural Gas Combustion Heat Input Capacity = 2.0 mmBtu/hr

	PM	PM10	SO2	NOx	VOC	CO
PTE tons/yr	0.1	0.1	0.0	0.9	0.0	0.2

TSP Calculations

EP-1 (Tire Grinding)

440 tires/day

=(440 tires/day)(365 days/yr)(12 lbs/rubber ground off)(0.06 % of TSP)(97.8% Control efficiency)/(2000 lbs/day)

=1.27 tons/yr

EP-5 (Rim Refurbishing unit- powder coating and mechanical shot blasting)

50 tire rims/day

Powder coating has 0 emissions due to the coating being recycled.

Shot blasting

1000 lbs of shot used /month

=(1000 lbs shot/month)(0.69 lbs PM/1000 lbs of shot)/(2000 lbs/ton)(12 months/yr)

=0.004 ton/yr

Emission Factors from AP-42